

ABSTRACT OF THE DISCLOSURE

5 The present invention discloses an integrated circuit receiver
available for infrared or ultrasonic transmission by use of digital
filtering for demodulation of infrared or ultrasonic carrier signal.
The integrated circuit receiver comprises an infrared receiver or
ultrasonic transducer to receive the transmitted signal from outside
and output the modulated signal. The modulated or carrier signal
10 is fed to an amplifier circuit to be amplified and then outputted to a
digital filter to filter out the carrier from the amplified signal, and
thus the original or unmodulated signal is recovered. The filtering
thereof is done by a digital filter instead of an analog one, therefore
there is no need for discrete devices such as capacitors, resistors,
15 diodes and inductor, and it is suitable to be integrated within a chip
as an apparatus to receive and detect infrared and ultrasonic
signals.